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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 09/919,430  | 07/31/2001  | Kevin H. Hansen      | IDF 1660 (4000-04700) | 4192             |
| 28003   | 7590        | 07/19/2005           | EXAMINER              |                  |
| SPRINT<br>6391 SPRINT PARKWAY<br>KSOPHT0101-Z2100<br>OVERLAND PARK, KS 66251-2100 |             |                      | WALSH, JOHN B         |                  |
|   |             |                      | ART UNIT              | PAPER NUMBER     |
|   |             |                      | 2151                  |                  |

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/919,430             | HANSEN ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | John B. Walsh          | 2151                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 5/5/2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,757,255 to Aoki et al.

As concerns claim 1, Aoki et al. discloses a measuring device for a network and a service node for coupling a client (column 10, line 41) to a network (abstract, line 16) having at least one server (column 10, line 41); a bandwidth measurement device (column 6, line 24) coupled to said path, said bandwidth measurement device configured for determining upload and/or download data transfer rates between said client and said service node (column 6, line 66; transmitting/receiving, abstract, line 4, roundtrip time).

Aoki et al. do not explicitly disclose said service node comprising: a gateway configured for connection to a network; a switch configured for connection to a client; a data routing system extending from said switch to said gateway, said switch, data routing system and gateway collectively forming a path (column 10, line 56), through said service node, configured for coupling said client to said network; each one of said plurality of subscriber terminals coupled to said service node by a corresponding xDSL line; said service node comprising: a switch coupled to each one of said plurality of xDSL lines; a gateway coupled to the Internet; a

data routing system extending from said switch to said gateway, said switch data routing system and gateway collectively forming a path, through said service node, for coupling each one of said plurality of subscriber terminals to the Internet . However, it would have been an obvious design choice to provide the network of Aoki et al. with a gateway, switch and an xDSL line.

As concerns claims 2 and 13, wherein said data routing system is comprised of a router  
(column 6, line 9; all of the devices, such as a router, switch and gateway are part of the  
network, therefore they're coupled together) coupled to said switch and said gateway.

As concerns claims 3 and 14, wherein said bandwidth measurement device is coupled to said gateway (bandwidth device and gateway are part of the network therefore they're coupled  
via the network).

As concerns claim 5, the service node of claim 3, wherein said client is a PC (17, obvious  
design choice that the terminal is a PC) and said network is the Internet (column 1, lines 15-25,  
TCP/IP).

As concerns claims 6 and 16, wherein said bandwidth measurement device is a server  
(column 10, lines 36-50).

As concerns claim 7, the service node of claim 6, wherein a measurement application  
resides on said bandwidth measurement server, said measurement application determining said  
upload and/or download data transfer rates for said bandwidth measurement server (inherent for  
bandwidth measurement device to comprise an application when disposed on a server).

As concerns claim 8, the service node of claim 7, wherein, if determining said upload data  
transfer rate between said client and said service node, said measurement application determines  
said upload data transfer rate based upon an analysis of arriving data packets originating at said

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client and, if determining said download data transfer rate between said service node and said client, said measurement application generates data packets for transfer to said client (column 2, lines 24-36; roundtrip, arriving packets measured, column 2, lines 10-12, generates packets).

As concerns claim 9, the service node of claim 8, wherein said measurement application maintains an applet (column 2, line 11) suitable for download to said client and wherein, if determining said upload data transfer rate between said client and said service node, said downloaded applet generates said data packets originating at said client and, if determining said download data transfer rate between said service node and said client, said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said client (column 2, lines 10-12).

As concerns claims 10 and 18, wherein a web application (inherent for server to have applications, wherein the method of monitoring is an application on a server which is accessed by a client via the network, rendering it a "web" application) resides on said bandwidth - measurement server, said client accessing said measurement application via said web application.

As concerns claims 11 and 19, wherein said bandwidth measurement server further comprises a measurement database (column 2, lines 24-55; server inherently has memory, wherein the information measured will be logged to an address in memory, acting as a database) coupled to said measurement application, said measurement database maintaining data collected during measurement of said upstream and/or downstream data transfer rates.

As concerns claim 12, an intranet for providing on-demand Internet access to subscribers, said intranet comprising: a service node (figure 1); and a plurality of subscriber terminals

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(clients, communications device, column 6, line 16), and a bandwidth measurement device (column 6, line 24) coupled to said path, said bandwidth measurement device configured for determining upload and/or download data transfer rates between said service node and requesting ones of said plurality of subscriber terminals which access said bandwidth measurement device (column 2, lines 24-36, roundtrip, arriving packets measured, column 2, lines 10-12, generates packets).

As concerns claim 15, the intranet of claim 14, wherein said bandwidth measurement device is further coupled to said router (coupled to the router via the network) and wherein said intranet further comprises a service provider terminal (client device coupled to the router via the network) coupled to said router, said service provider terminal accessing said bandwidth measurement device through said router (client is connected to the router, which is connected to the measurement device/server, therefore connecting the client to the server).

As concerns claim 17, the intranet of claim 16, wherein a measurement application (inherent for bandwidth measurement device to comprise an application when disposed on a server) resides on said bandwidth measurement server, said measurement application performing said measurements of said upload and/or download data transfer rates for said requesting ones of said plurality of subscriber terminals (clients).

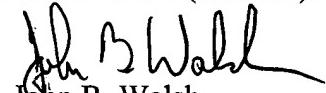
As concerns claim 20, wherein said measurement database is further coupled to said web application, said service provider terminal accessing said data maintained in said measurement database through said web application (client accesses database information through the network which comprises an application layer).

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Wednesday from 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John B. Walsh  
Primary Examiner  
Art Unit 2151